

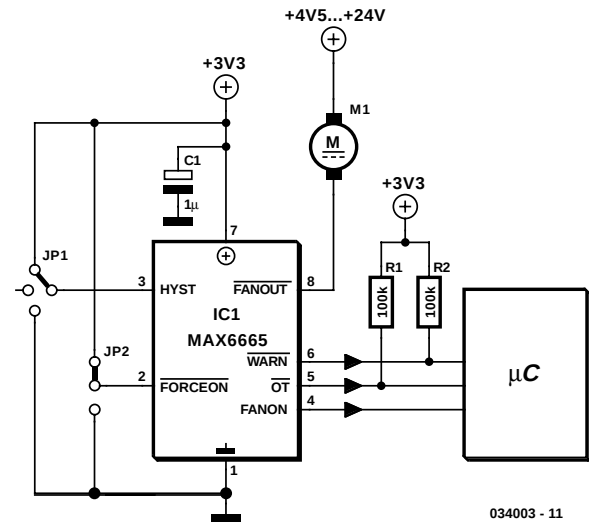
Fan Controller using just Two Components

G. Kleine

The Maxim MAX 6665 (www.maxim-ic.com) provides a complete temperature-dependent fan controller. It can switch fans operating at voltages of up to 24 V and currents of up to 250 mA. The IC is available from the manufacturer in versions with pre-set threshold temperatures between +40 °C (MAX6665 ASA 40) and +70 °C (MAX6665 ASA 70). The device's hysteresis can be set by the user via the HYST input, which can be connected to +3.3 V, connected to ground, or left open. The following table shows the hysteresis values available:

HYST	Hysteresis
open	1 °C
ground	4 °C
+3.3 V	8 °C

The other pins of the SO8 package are the FORCEON input and the status outputs WARN, OT and FANON. The test input FORCEON allows the fan to be run even below the threshold temperature. The open-drain output WARN goes low when the temperature rises more than 15 °C above the threshold temperature, while the open-drain output OT indicates when the



temperature is more than 30 °C above the threshold. The push-pull output FANON can be used to indicate to a connected microcontroller that the fan is turned on.